

# STORMWATER ENTERPRISE

## **POLICY STATEMENT**

**SUBJECT:** GREEN INFRASTRUCTURE REVIEW

DATE: APRIL 8, 2022

#### **OVERVIEW:**

The City has adopted minimum infiltration requirements as part of the 4 Step Process for development and redevelopment sites. This policy describes the requirements surrounding green infrastructure.

#### **DETAILS:**

Green infrastructure requirements will be implemented:

- May 1, 2022 for all new Final Drainage Reports submitted for review
- November 1, 2022 for all Final Drainage Report approvals

For the purposes of this policy clarification, Drainage Letters count as Final Drainage Reports. The implementation timelines do not apply to MDDPs, Preliminary Drainage Reports, FDR Addendums, or other separate drainage studies.

### **POLICY:**

Receiving Pervious Areas must be inside the private property boundary. Public ROW cannot be used.

Maintenance Agreements (MAs) will reference Planned Infiltration Areas (PIAs). If no MA will be recorded on the site, a Notice must be recorded against the property.

PIAs must be located outside of the 50-year floodplain.

Pervious areas in Permanent Control Measures that are wetted during the water quality event can be counted as RPA.

Landscape areas can be utilized as PIAs as long as both stormwater and landscaping criteria are met.

PIAs can involve minor amounts of depression storage to encourage infiltration. Small depressions up to 5" deep are considered to meet water rights requirements without additional calculations.

According to the Drainage Criteria Manual Volume 2, Chapter 1, Section 4.0, Step 1, complete backup calculations must be included in the Final Drainage Report. Complete backup calculations must include the following:

• To-scale diagram of site showing Indirectly Connected Impervious Areas as translucent blue, and Receiving Pervious Areas as translucent green, similar to the following:



- o Scale must be shown
- Flow arrows must be shown
- Clear labeling between individual areas in diagram and corresponding areas in spreadsheet or SWMM model
- Calculations necessary to show that all Receiving Pervious Areas receive runoff during the water quality event.
  - Swales (height difference between local high points (banks) and invert of flow area is greater than or equal to 2 feet) – only the wetted perimeter during the water quality event can be counted. Manning's equation can be used to determine the wetted perimeter. The flow value during the water quality event can be estimated using the following equation:

$$Q_{WQ}(cfs) = \ \frac{Q_5(cfs)}{3}$$

 Buffers – unless a level spreader, concrete edger, or slotted curb is proposed, water can be counted as having an expansion ratio of 1:1 moving outward from a concentrated flow entry point, as shown below.

